Patent
Attorney Docket No. 74239

REMARKS

Responsive to the advisory that the application lacks a sequence listing in compliance with 37 C.F.R. §§1.821-1.825, a sequence listing is being sent with overnight courier on even date. Copies of the sequence listing and statement under rule 825(b) are attached hereto for the Examiner's convenience. Attempts to file the sequence listing electronically have been unsuccessful as the "old" electronic filing system only accepts sequence listings in association with a new application filing, and submissions of electronic versions of sequences listings with the "new" system is not expected to be functional until autumn 2006. As the sequence listing will be entered in the file shortly, entry of the corresponding amendments to the description, pending claim 4, and drawings presented herein is respectfully requested.

Responsive to the objection to the title, the same has been addressed herein.

Responsive to the rejection of claims 2-4 under 35 U.S.C. §112, second paragraph, the same have been clarified by present amendment. With regard to claim 4, Applicants have relied on the term "peptide" to encompass one or more amino acids. In the absence of any absolute definition of how many amino acids are required to form a peptide and considering the frequent use of the term to mean an amino acid molecule without secondary structure, Applicants have chosen to use the term broadly. This is supported by the originally-filed claims and description, which are directed to peptides comprising only one modified amino acid. As claims 2-4 distinctly claim the subject matter therein, the rejection should be removed.

Responsive to the rejection of independent claim 1 and dependent claims 2, 3, 5 and 6 under 35 U.S.C. §102(b) as anticipated by Mosbach, the rejection is respectfully traversed. Independent claim 1, from which all other rejected claims depend, sets forth a method whereby a peptide is synthesized *in situ* on a support which can then be used as a template.

That is, the invention discloses and claims the use of solid phase synthesis products (SPS) as templates for the generation of hierarchically-imprinted materials capable of recognizing the pendent SPS product (e.g. the peptide) or a target containing the SPS as a substructure. Thus, it combines the concept of solid phase synthesis with that of hierarchical imprinting. The resulting products form accessible, affordable artificial receptors for oligomeric or polymeric biological targets.

In contrast, Mosbach teaches immobilization of pre-synthesised biomolecules onto supports (column 5, line 21). There is no teaching of direct synthesis on a support. In the absence of the same, it is improper to suggest Mosbach discloses the present invention, where step (a) of claim 1 clearly sets forth that the peptide is synthezised on the support.

Dependent claims 2, 3, 5, and 6 incorporate all the limitations of claim 1 and are novel for at least the same reasons as set forth above. Accordingly, the rejection of claims 1-3, 5, and 6 under §102(b) in view of Mosbach is improper and should be withdrawn. The same is respectfully requested.

Responsive to the rejection of independent claim 1 and dependent claims 2-6 under 35 U.S.C. §103(a) as unpatentable over Mosbach, the rejection is respectfully traversed. As noted above, Mosbach lacks any teaching of direct synthesis of a peptide on a support, teaching instead immobilization of pre-synthesised biomolecules (column 5, line 21) or the even more general "treatment" with biomolecules (column 5, line 41). In addition to failing to render the synthesis step lacking in novelty as described above, immobilization and/or treatment also fail to render the synthesis step obvious.

The sheer quantities of pure biomolecules required to perform the Mosbach method mean the approach requires expensive starting materials and, for some targets, is completely unfeasible. Furthermore, immobilization of biomolecules in a correct orientation is time consuming, leading to a further expense. Instead, the present invention provides a method to

synthesize a peptide directly on a support and couple one or a few monomers at a time. Thereby, the appropriate receptors for peptides or interest can be generated more efficiently and cost-effectively. The method also provides for improved control of the surface orientation of the biomolecular template; something not feasible with the Mosbach method. Because the Mosbach method fails to disclose or suggest the synthesizing step, and furthermore because the Mosbach method is disadvantageous with respect to low-cost starting materials and ease of use, it is apparent the method disclosed in Mosbach fails to render the method of independent claim 1 obvious.

Dependent claims 2-6 incorporate all the limitations of claim 1 and are patentable for at least the same reasons as set forth with regard to claim 1, above. Accordingly, the rejection of claims 1-6 under §103(a) in view of Mosbach is improper and should be withdrawn. The same is respectfully requested.

In the event there are any questions concerning this Amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of the application may be expedited.

No additional fees are believed to be due at this time; however, if necessary to effect a timely response the Commissioner is authorised to deduct the necessary fees from Deposit account No. 501249.

Respectfully Submitted,

April 4, 2006

Olivia Tolan, Reg. No. 45,161

ALBIHNS STOCKHOLM AB
Box 5581
SE-114 85 Stockholm, Sweden
tel +46 (0) 8 5988 7200
fax +46 (0) 8 5988 7300
Customer No. 26288